**DOCUMENT RESUME**

**ED 169 298** **CE 020 483**

| | |
|---|---|
| AUTHOR | Conner, Connie C. |
| TITLE | Office Occupations--Stenographic, Duplicating Machine. Kit No. 9. Instructor's Manual [and] Student Learning Activity Guide. |
| INSTITUTION | Clemson Univ., S.C. Vocational Education Media Center.; South Carolina State Dept. of Education, Columbia. Office of Vocational Education. |
| SPONS AGENCY | Office of Education (DHEW), Washington, D.C. |
| PUB DATE | 78 |
| GRANT | SC-5058-76-I-211-0330 |
| NOTE | 30p.; For related documents see CE 020 474-566 |
| AVAILABLE FROM | Vocational Education Media Center, 10 Tillman Hall, Clemson University, Clemson, South Carolina 29631 (complete set of modules, 14 filmstrips and cassettes, $260.00; set of 87 student modules, $42.50) |
| EDRS PRICE | MF01 Plus Postage. PC Not Available from EDRS. |
| DESCRIPTORS | Behavioral Objectives; Instructional Materials; Learning Activities; *Learning Modules; Occupational Clusters; *Occupational Information; *Office Machines; *Office Occupations Education; Prevocational Education; *Reprography; *Stenography |

ABSTRACT

An instructor's manual and student activity guide on duplicating machines are provided in this set of prevocational education materials which focuses on the vocational area of office occupations. (This set of materials is one of ninety-two prevocational education sets arranged around a cluster of seven vocational offerings: agriculture, home economics, distributive education, health occupations, world of work, trade and industry, and office occupations.) The instructor's guide is organized into the following elements: title of activity, duration of activity (five to eight periods), activity goals, instructional objectives (seven), related vocational clusters, and activity implementation (description, materials needed, safety considerations, teacher preparation prior to class, during the class, follow-up activities, and a master for duplication [a view fact sheet]). The student activity guide provides step-by-step instructions (narrative and illustrations) for completing each instructional objective (e.g., prepare a master to be duplicated on a spirit duplicator, correct errors on a spirit master). At the end of each set of instructions is a student check point (evaluation activity). Occupational descriptions for a secretary and a duplicating-machine operator conclude the document. (JH)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED169298

# OFFICE OCCUPATIONS -- STENOGRAPHIC, DUPLICATING MACHINE

Kit No. 9

## INSTRUCTOR'S MANUAL

Prepared by

Connie C. Conner
Westside High School
Anderson, South Carolina 29621

State Department of Education
Office of Vocational Education
Prevocational Education
Columbia, South Carolina 29201

In Cooperation With

Vocational Education Media Center
Clemson University
Clemson, South Carolina 29631

1978

CE 020 483

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.



PERMISSION TO REPRODUCE THIS MATERIAL BY MICROFICHE ONLY HAS BEEN GRANTED BY

Art Jansen

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND THE ERIC SYSTEM CONTRACTORS.

*These materials have been developed from funds provided by Grant SC-5058-76-I-211-0330 under the Appalachian Regional Development Act Amendments of 1967, Department of Health, Education and Welfare, Office of Education.*

## TITLE OF ACTIVITY

Kit No. 9, Office Occupations – Stenographic, Duplicating Machine

## DURATION

Main Activity – 3 to 5 periods
Follow-up Activity – 2 to 3 periods

## GOALS

The student will know the proper procedures for preparing and running off a spirit master, and/or the student will know the proper procedures for preparing and running off a mimeograph stencil.

The student will understand basic multiple copy duplicating machine operations.

The student will be aware of dangers and precautions associated with multiple copy duplicating machine's ink and fluid.

## INSTRUCTIONAL OBJECTIVES

The student will draw a rough sketch for a handout for the vocation of his/her choice.

The student will prepare a master to be duplicated on a spirit duplicator.

The student will correct errors on a spirit master.

The student will recognize the dangers and precautions related to the duplicating fluid used with the spirit duplicator.

Optional: The student will prepare a stencil to be duplicated on a mimeograph machine.

Optional: The student will correct errors on a stencil.

Optional: The student will operate a mimeograph machine.

## VOCATIONAL CLUSTERS

All of the vocational clusters can be included in this activity. Since each student can choose his/her own field, there should be a fair representation. However, you may wish to have the students draw out of a hat for the occupation on which to make their handouts.

## ACTIVITY IMPLEMENTATION

### A. Description

This activity can be done individually or by dividing the class into the six vocational clusters (Agriculture, Distributive Education, Health, Home Economics, Office Occupations, and Trade and Industry). If done individually, you may have each student pick out any job or any one from a list prepared by you. The students will prepare a master or a stencil or both. If a student chooses to do both, you may ask for a second occupation, or at least a different handout.

### B. Safety

Read and know antidotes for ink and fluid. Be aware of cautions. Special care should be taken in making corrections with razor blade or X-acto knife.

### C. Materials

1. Technical Equipment
   - Spirit duplicating machine
   - Two copies of VIEW job descriptions

2. Expendable Supplies
   - Duplicating paper (one or two reams depending on the size of the class)
   - One box of masters
   - Spirit duplicating fluid
   - Hand cleaner
   - Paper clips
   - Paper towels
   - Old newspapers

3. Optional Expendable Supplies
   - Mimeograph paper (one or two reams depending on the size of classes)
   - Stencils – packaged in boxes of 24 (known as a quire)
   - Correction fluid
   - Mimeograph ink

(Note: Many of these items will be available from the office. If not, many times they can be requisitioned from the central warehouse for the school district. They may also be purchased from an

office supply company.

**D. Preparation Prior to Class**

Display pamphlets on different jobs. Consult the guidance office or call JOB service. Read the instructions on the machine to acquaint yourself more fully with the process. You may want to make a handout yourself on teaching to use as an illustration. Read the student instruction booklet. Students should be told to wear old clothes on the day the stencils will be run off.

**E. During Class Session**

INTRODUCTION – In almost every kind of job, there is a need for multiple copies of some form. The term multiple copies simply means the duplication of the same information. For the next few days, we are going to explore one or two ways to prepare multiple copies, spirit duplicating (runs off purple) and mimeographing (runs off black).

Each student will design a handout to "sell" the job chosen earlier. Pamphlets may be used as well as the "VIEW" series, but the handout itself must be original. The handouts should be as appealing as possible. They will be judged by other students in the class. Students may wish to confer with someone else, but the work itself MUST be original. The winner will be determined by the handout that the most students choose to follow-up with VIEW job descriptions. (You may not want to tell the students this until after the follow-up activity is over and the winner is named.)

TO THE TEACHER – Distribute the booklets and oversee the activity. Make sure the students are bearing down hard enough to run a good copy, but not so hard as to tear the master or stencil.

Be sure the paper gauge on the spirit duplicating machine is on 11" and not 14".

It will be necessary to help at all times with the machines. Do NOT let the students run the machines without your supervision.

It would probably be a good idea to explain general machine operation to the group.

Spirit Duplicating: This machine basically operates by sending the sheet of paper through some rollers and coats each sheet with the fluid. This is why these sheets feel wet. When the coated sheet of paper comes into contact with the carbon on the back of the master, the fluid picks up only the carbon; thus, the impression is transferred to the paper.

(Optional) Mimeograph: The stencil is made of a very thin fabric covered with wax. As the stencil is drawn on or typed on, the wax separates. Then, as the stencil is put on the machines, the wax will not let the ink pass through the stencil. Where the wax is cut, however, the ink will be transferred to the paper as it goes through the machine and contacts the stencil.

Always make sure the area is cleaned up after each run of a stencil or master.

**F. Follow-up Activities**

(As many of these as possible should be used.)

1. Have each student distribute one copy of the handout to every other student and one to the teacher.
2. Have the student examine all the handouts and decide on two they want to know more about by using the VIEW fact sheet. The handout having the most VIEW fact sheets handed in on it will be the winner in one category.
3. Have the students vote on the handout they like the best. The one with the most votes wins the second category.
4. Display the handouts received on the walls.
5. Have each student tell good and bad points of a handout and give possible improvements.

**MASTERS FOR DUPLICATION**

VIEW Fact Sheet

Example Handout

## VIEW FACT SHEET

NAME _____ CLASS _____ OCCUPATION _____

A. List the advantages (good points) of this occupation (job).

B. List the disadvantages (bad points) of this occupation (job).

C. List three things you should know to do this occupation (job).
1.
2.
3.

D. What type of education should you get to be prepared (do) for this occupation (job)?

E. What courses must you take to go into this occupation (job)?

F. What do you think your future in this occupation (job) will be?

G. What wage can you expect in this occupation (job)?

H. What are the working hours of this occupation (job)?

I. To learn more about this occupation (job), write to:

J. Using a scale of 1 to 5, circle the number that measures your interest in this occupation (job) as a possible career.

I don't like it. 1 2 3 4 5 I like it.

**IF YOU'RE LOOKING FOR A JOB**
**WHERE OPPORTUNITIES ARE FAR REACHING**
**TAKE A TIP FROM ONE WHO KNOWS**
**AND TRY YOUR HAND AT TEACHING!**

# OFFICE OCCUPATIONS – STENOGRAPHIC, DUPLICATING MACHINE

Kit No. 9

## STUDENT
## LEARNING ACTIVITY GUIDE

Prepared by

Connie C. Conner
Westside High School
Anderson, South Carolina 29621

State Department of Education
Office of Vocational Education
Prevocational Education
Columbia, South Carolina 29201

In Cooperation With

Vocational Education Media Center
Clemson University
Clemson, South Carolina

1978

## INTRODUCTION

If you have ever handwritten invitations to a party, you know how long it takes to write the same information over and over. In this activity you are going to see a quick way to make copies of the same thing.

The one main difference in hand copying and using a machine of course is time. Imagine how long it would take for you to write the same information on a regular note-book sized piece of paper if you had to have 20 copies, or 50, or 100 copies!! By using one of two machines (mimeograph or spirit duplicator), you can run off up to 3,000 copies of the same information in a fraction of the time and by writing everything down just once.

You will be concerned with preparing one master (the kind that runs off purple) and/or one stencil (the one that runs off in black ink).

## GOALS

1. The student will know the proper procedures for preparing and running off a spirit master and/or the student will know the proper procedures for preparing and running off a mimeograph stencil.
2. The student will understand basic multiple copy duplicating machine operations.
3. The student will be aware of dangers and precautions associated with multiple copy duplicating machines' ink and fluid.

## DIRECTIONS

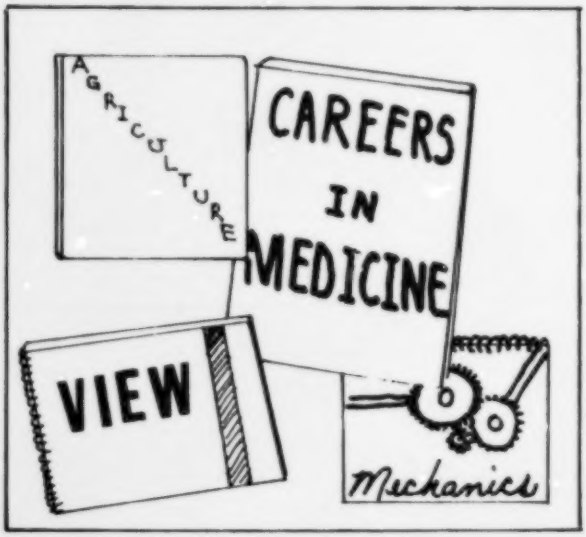
Read and follow each step with the stencil or master your teacher gives you. Do not write in the text. Be sure to go over each step--do not leave any out. Make sure you have met the requirements of each Check-Point before continuing.

Material:
A ball point pen
8½" x 11" white paper

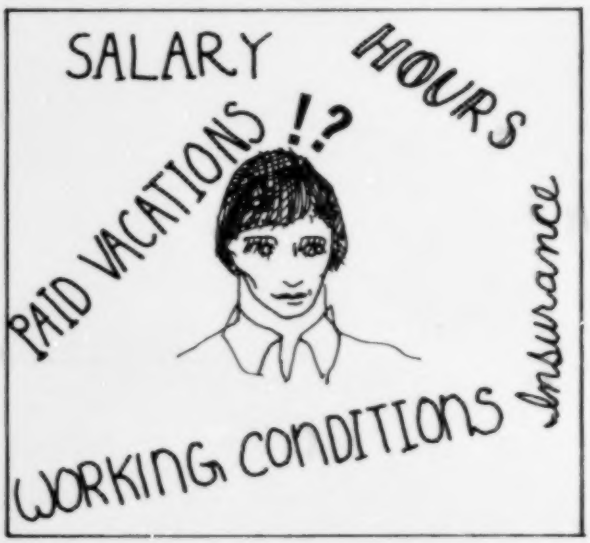
## PROGRAMMED TEXT

### Instructional Objective 1

The student will draw a rough sketch for a handout for the vocation of his/her choice.

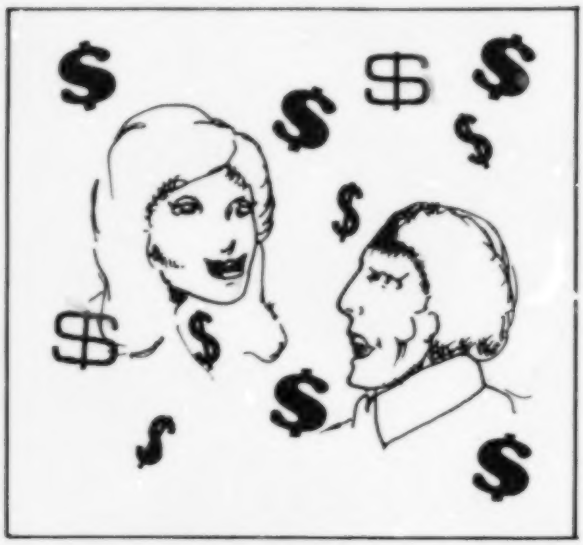



STEP 1 – Choose a job from the "VIEW" sheets, pamphlets from the guidance office, or a book you've read. Make sure it is one that really interests you.



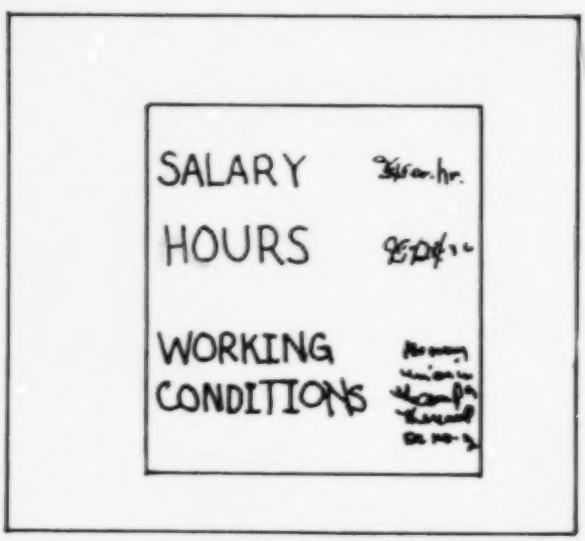

STEP 2 – Decide what makes this job sound so good to you.

1



STEP 3 – Decide what you would say to a friend to get them interested in this job.

STEP 5 – Using either pictures or words, make a rough sketch showing the job that you have chosen and bring out the good things about it. (You may want to make two sketches and choose the best one.)




STEP 4 – Put these ideas down on a piece of paper in a way that makes the job sound interesting.

## Check Point

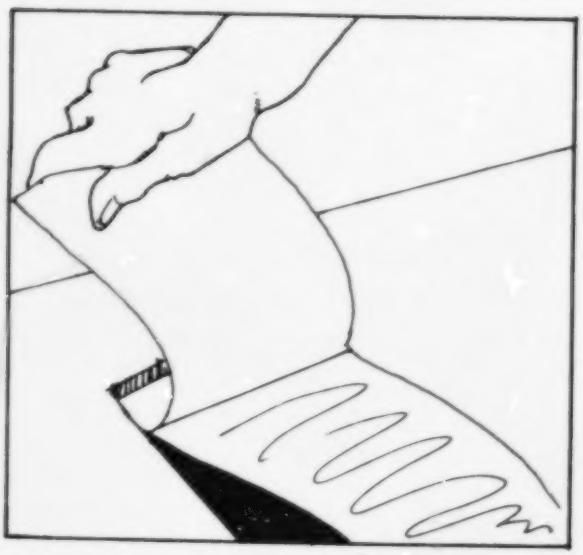
Did you make the sketch as appealing as you could?

Did you cover all the good points about this job?

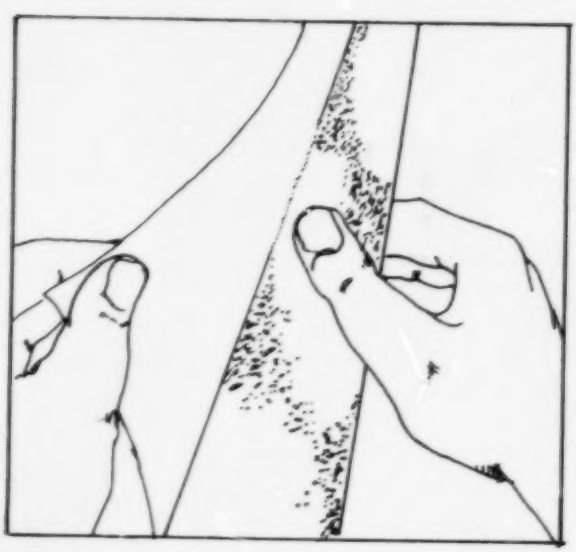
Does your sketch look about like you want your finished copy to look?

# Instructional Objective II

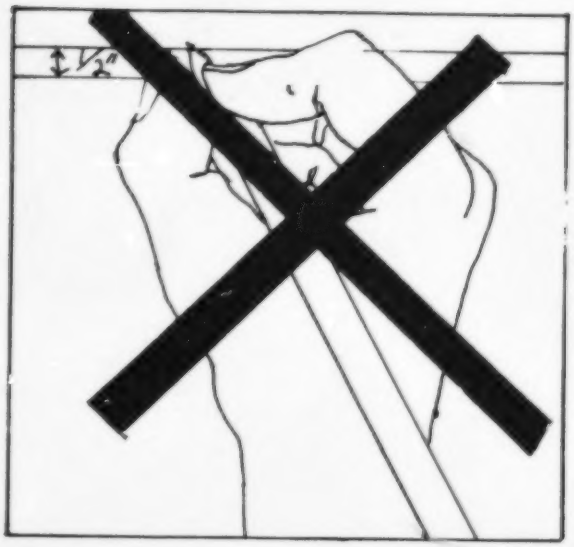
The student will prepare a master to be duplicated on a spirit duplicator.



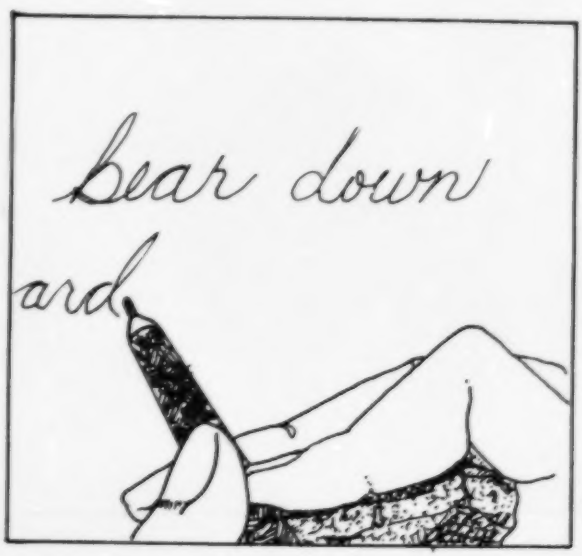
STEP 1 – Look closely at the spirit master. Locate the white top sheet, the protective brown (or light purple) sheet, and the colored carbon sheet.



STEP 2 – Remove the protective brown sheet before starting to write on the master, but do not throw it away.

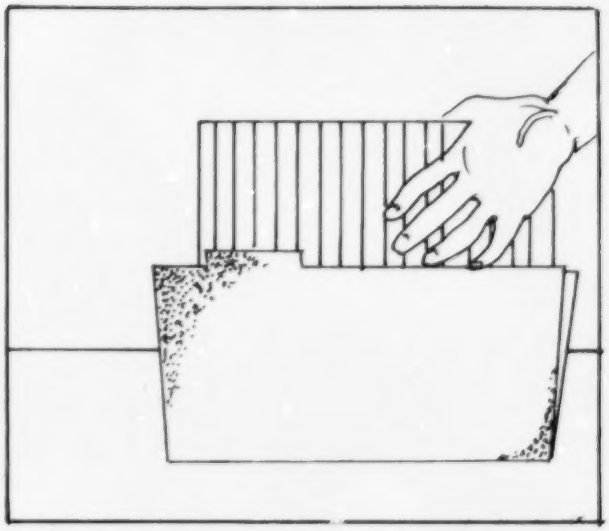



STEP 3 – Be sure not to write on the top ½" or bottom ½" (1.27 cm) as it may not show up on the finished copy.

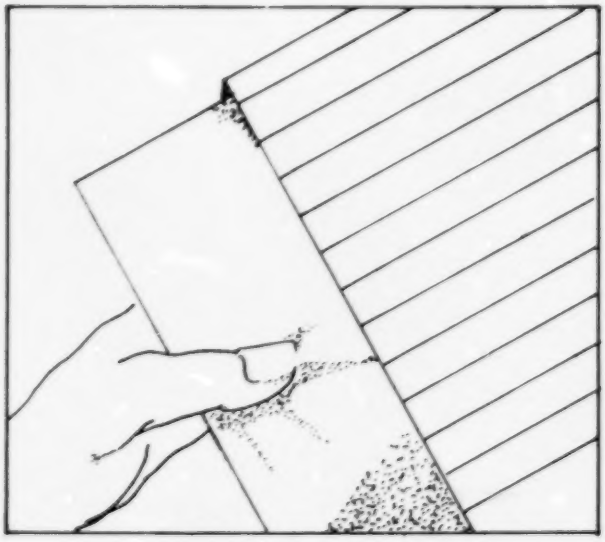



STEP 4 -- Use a ball point pen and bear down hard. (Do not tear the master.) Check for hardness on the back. As a rule, if the lines are solid and dark, the copy will be very clear. If there are no errors, skip the next objective. If there is an error, go to the next objective and read and follow instructions to correct the error.

STEP 5 – Check the master to make sure it looks just like you want the finished copy to look.



STEP 7 – Place the master in a safe place until you are ready to run it off making sure NOT to bend or fold the master.



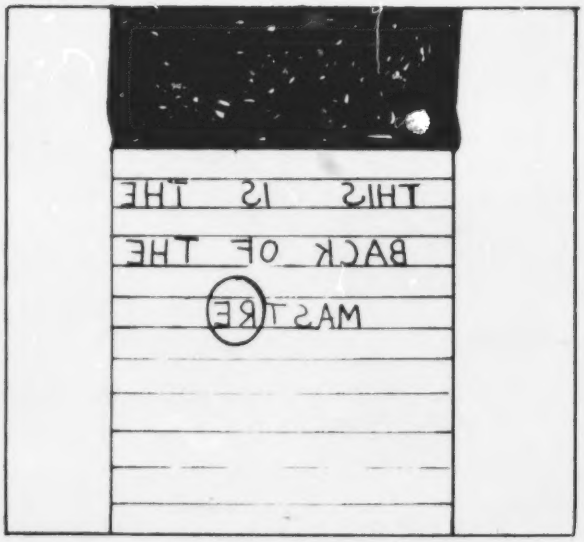
STEP 6 – Upon completion of the master, put the brown protective sheet back in place to protect the back of the white sheet and prevent any unwanted carbon marks from coming through on the final copies.

## Check Point

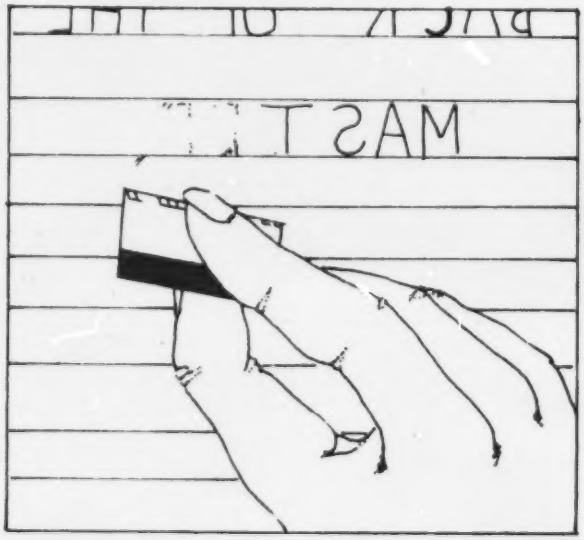
Did you check for hardness?
Did you check for error?
Did you place the master in a safe place?

## Instructional Objective III

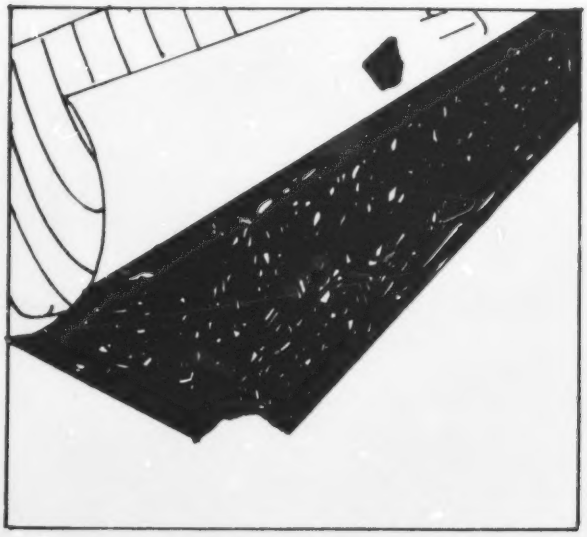
The student will correct errors on a spirit master.



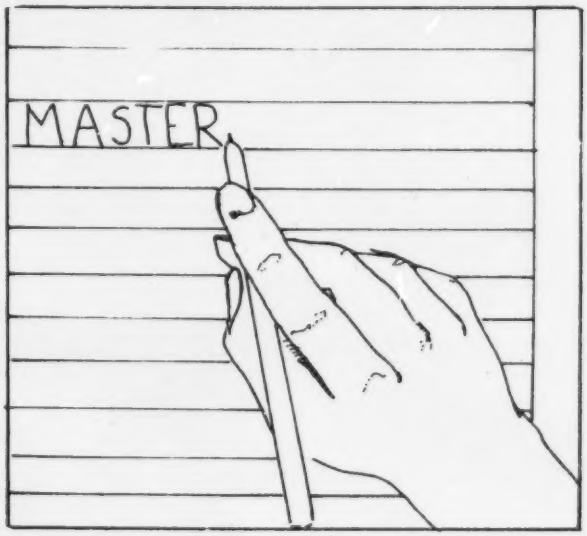

STEP 1 – Turn the master over to the back of the white sheet.



STEP 2 - Using a razor blade or x-acto knife, scrape off the mistake from the BACK of the white sheet. Be careful not to cut the master.



STEP 3 – Get an UNUSED portion of the dark carbon sheet and put it directly behind where you are going to correct the error.




STEP 4 – Make the correction by writing on the white sheet. Go back to Instructional Objective II, Step 4, and finish activity.

## Check Point

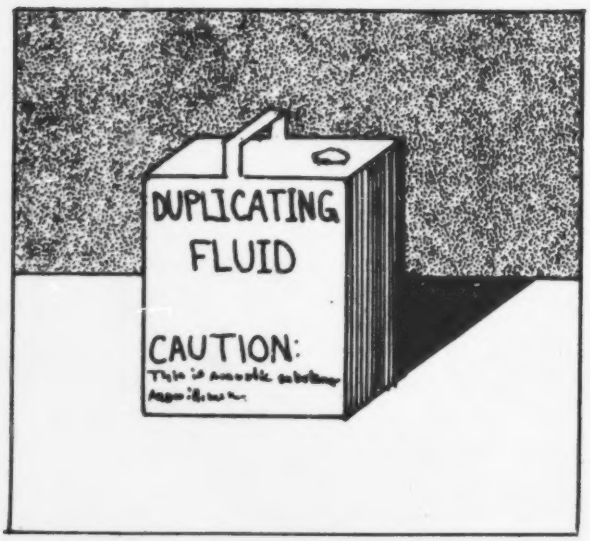
Did you scrape off all of the unnecessary carbon?

Were you careful not to cut the master?

Did the back of the white sheet look as neat as you want it to?

## Instructional Objective IV

The student will recognize the dangers and precautions related to the duplicating fluid used with the spirit duplicator.




STEP 1 – Read the spirit duplicating can for cautions and warnings.

STEP 2 – Read what to do in case of accidental poisoning.

STEP 3 – Write down on a sheet of paper what to do if it does happen.

## Check Point

Did you read the cautions and warnings carefully?

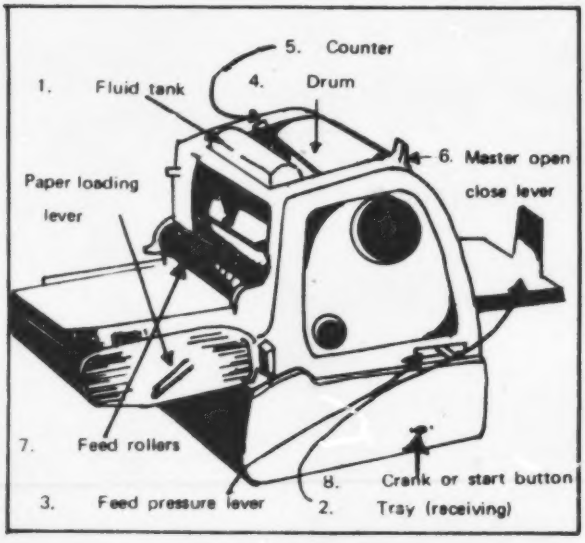
Did you write down on a sheet of paper what to do in case of accidental poisoning?

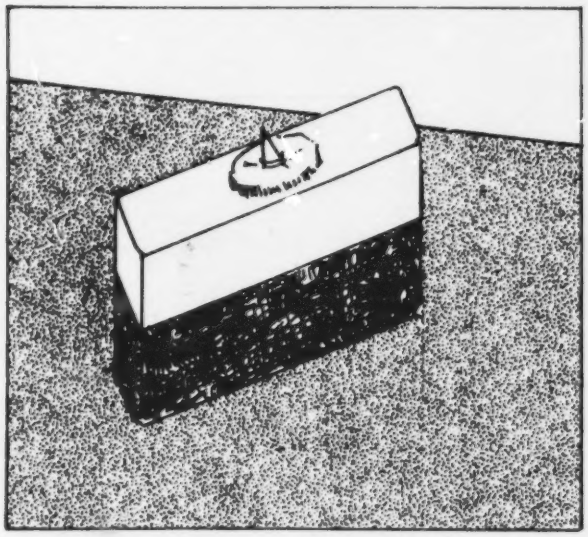
# Instructional Objective V

The student will operate a spirit duplicator.

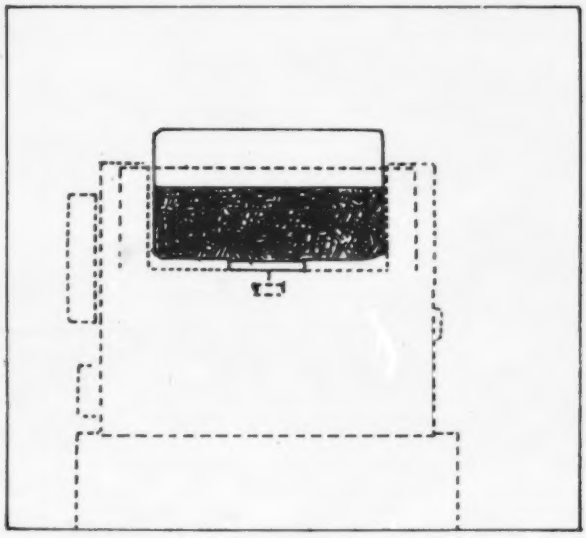
STEP 1 – Locate all these parts on your spirit duplicator:

1. Fluid Tank
2. Tray (Receiving)
3. Feed Pressure Lever
4. Drum
5. Counter
6. Master Open-Close Lever
7. Feed Rollers
8. Crank or Start Button
9. Paper Loading Lever

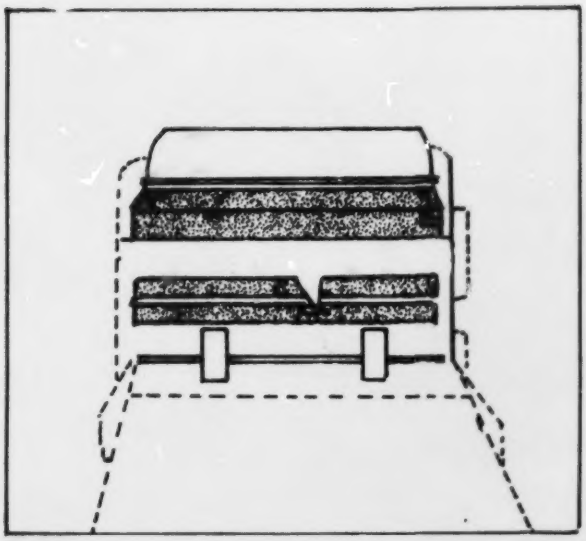


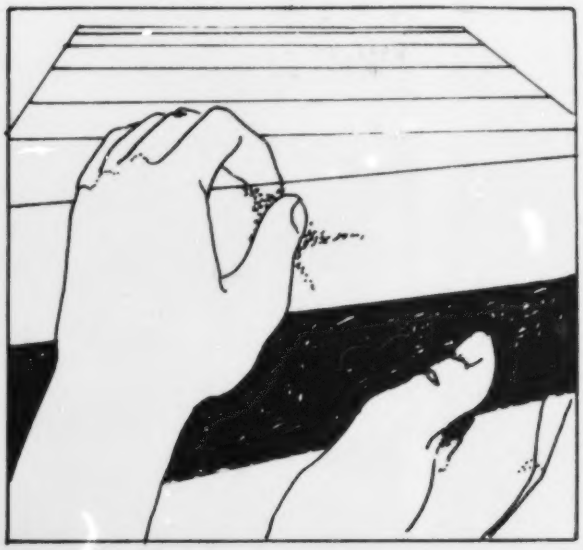
STEP 2 – Make sure the fluid tank has at least 1" (2.54 cm) of fluid in it. If not, fill the tank with the spirit duplicating fluid.



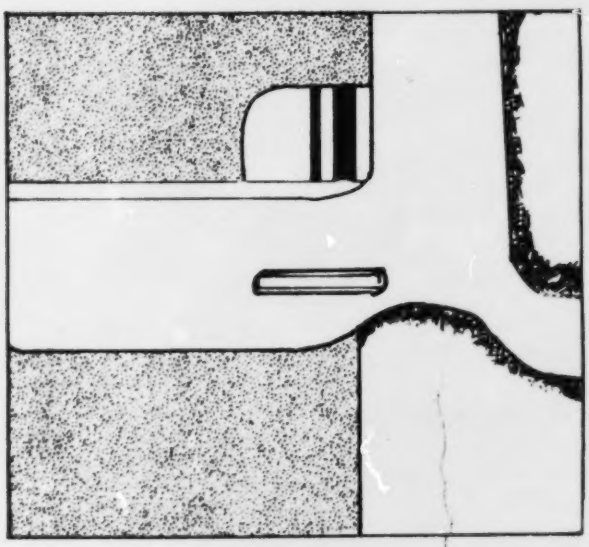
STEP 3 – Turn the fluid tank upside down in its tray. This will allow only enough fluid to come out of the tank to soak a felt pad with the fluid.



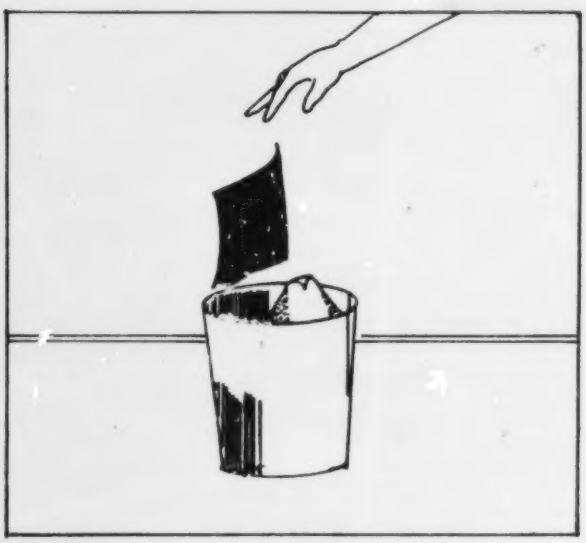
STEP 4 – Lock the tray into position, so that each piece of paper that feeds into (goes through) the machine will be coated with the fluid.



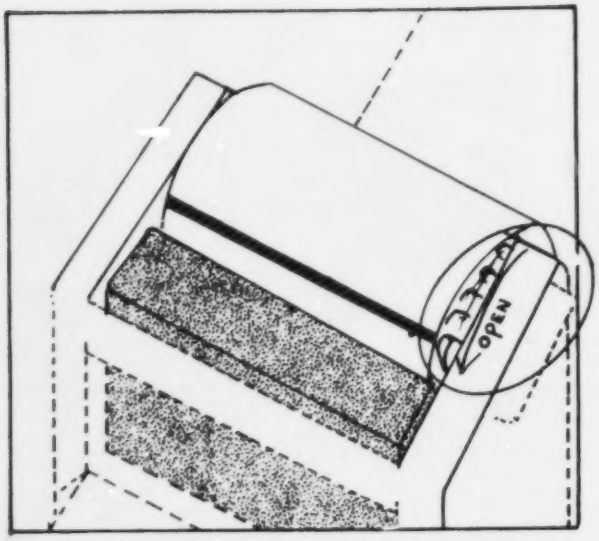
STEP 6 – Tear the master apart.



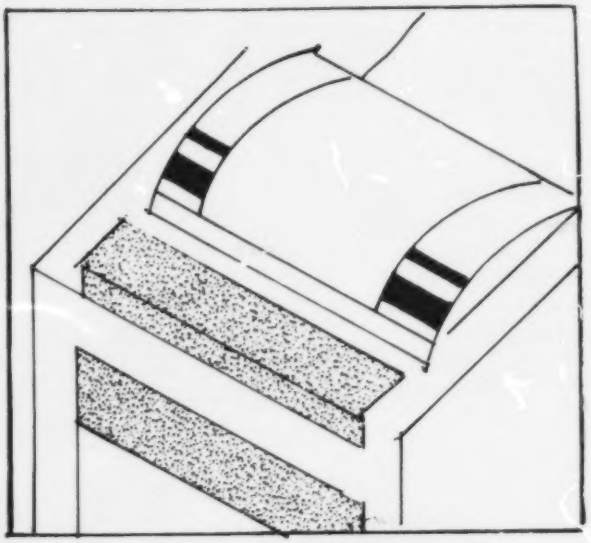
STEP 5 – Push the feed pressure lever forward.



STEP 7 – Throw away the dark carbon sheet and the brown or light purple protective sheet.

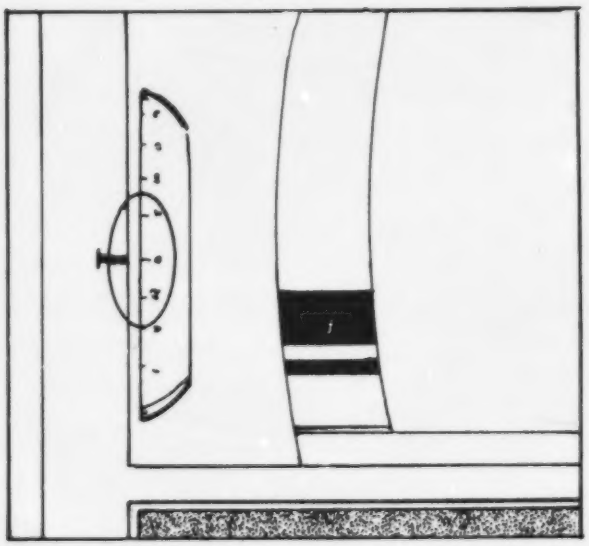



STEP 8 – Move the clamp release lever to the open position.



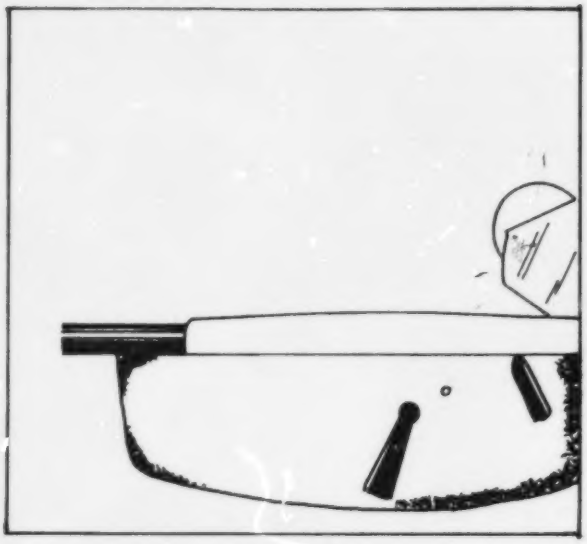
STEP 10 – Lock master into place using the open-close clamp. Be sure that you put the master in the middle of the drum so that it will run off evenly.

STEP 9 – Place the white sheet of the spirit master on the drum of the machine and slip the top edge of it into the open clamp. Make sure writing is backward to you with carbon side up so it is like looking into a mirror.

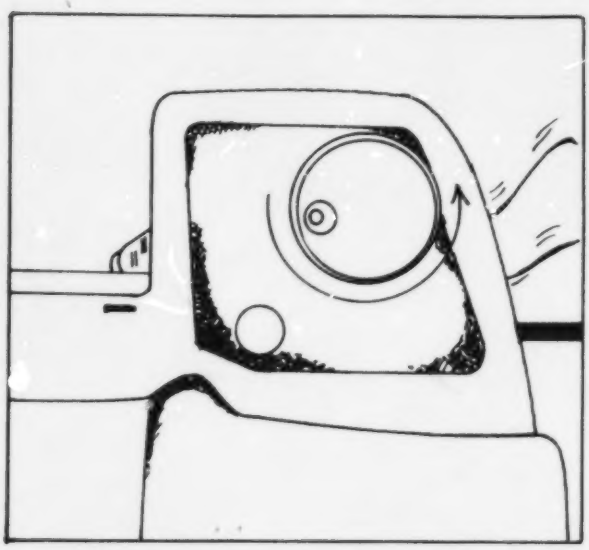


STEP 11 – Put the counter on 0.

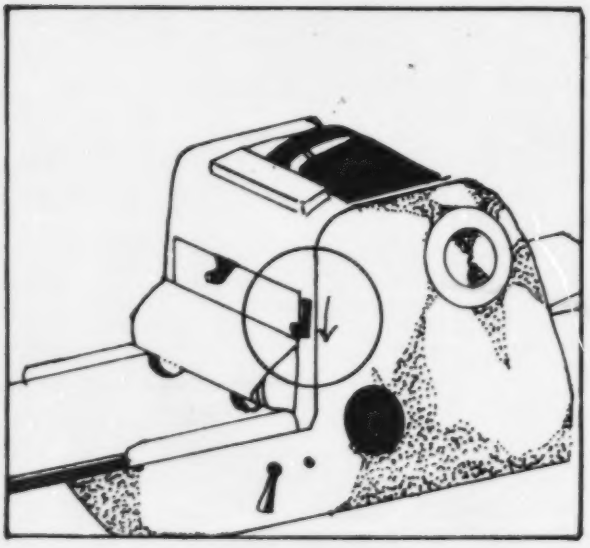
17



STEP 12 – Put the paper on the feed tray. Read instructions on receiving tray.

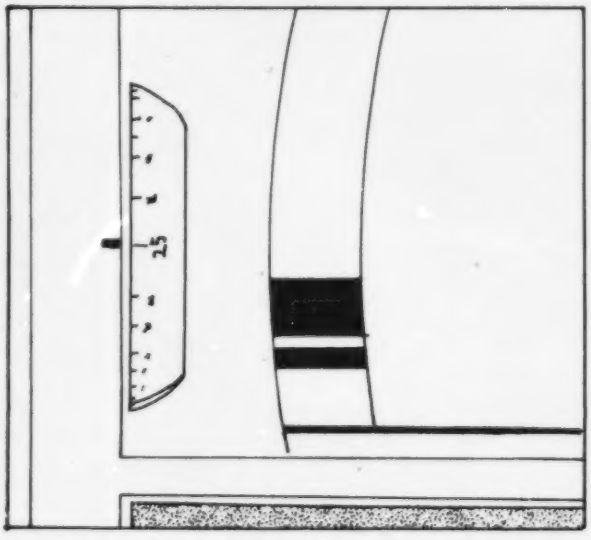


STEP 14 – Turn the crank in a counter-clockwise motion. Let your instructor check the first copy to see if the machine is functioning properly, and to see if the master is properly on the drum.



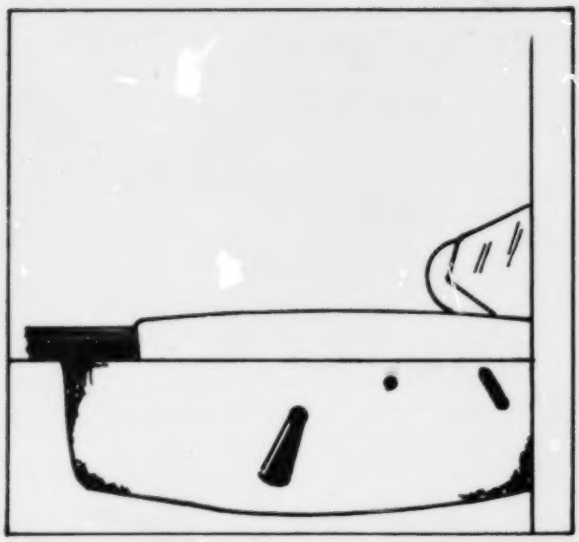
STEP 13 – Lower the feed rollers using the feed roller lever.

IF USING A MANUAL MACHINE: (Omit if your machine is electric).



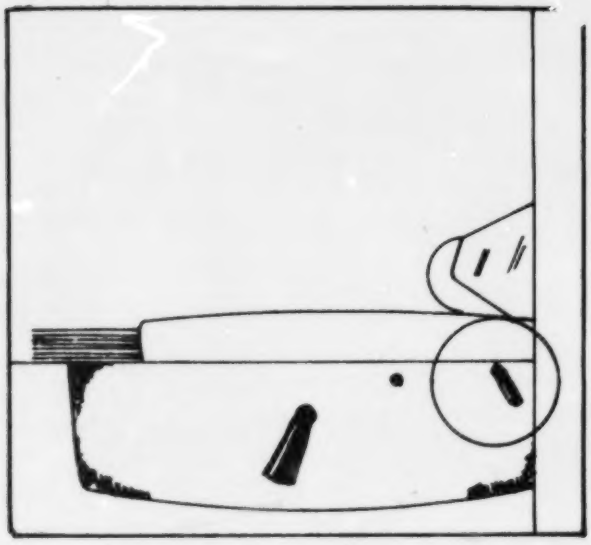
STEP 15 – Continue to turn the crank until the counter reaches the number of copies you want.

18

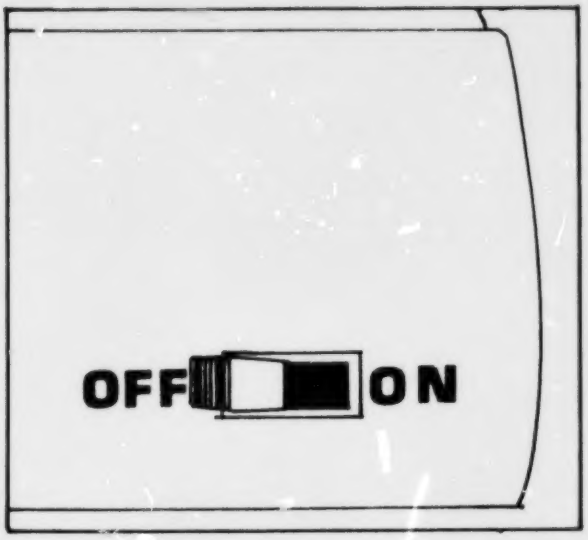


IF USING AN ELECTRIC MACHINE: (Omit if your machine is manual).

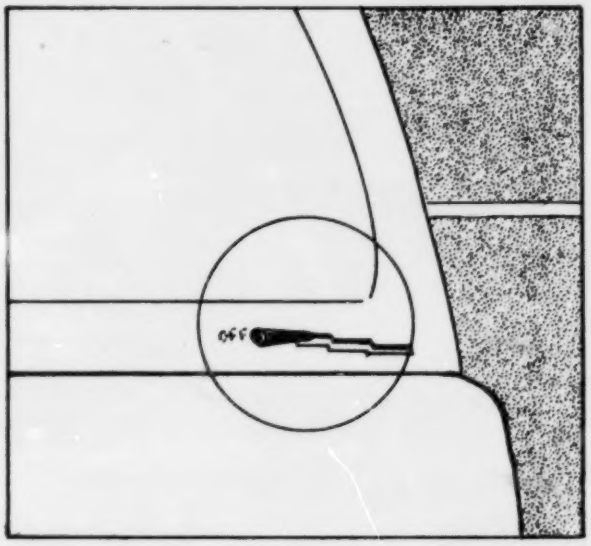
STEP 16 – Turn the machine on. Push feed button forward to feed one sheet at a time. Let your instructor check the first copy to see if the machine is working properly, and to see if the master is properly on the drum.



STEP 17 – For feeding constantly, push the feed button all the way to the back (or left). The center position turns the machine to neutral. Put the machine in the neutral position when you reach the number of copies you want.

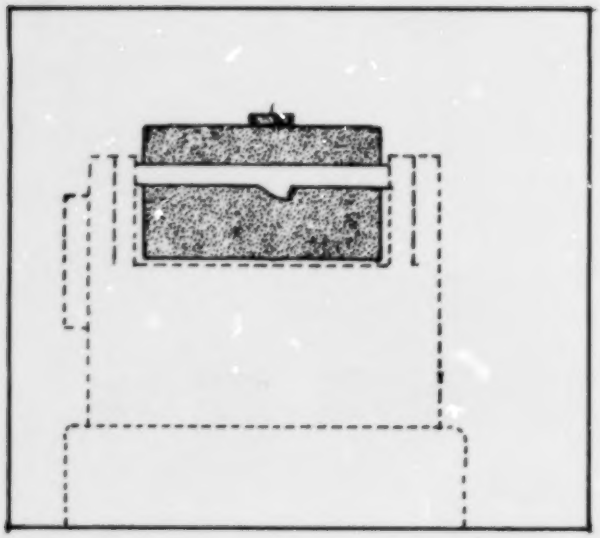



STEP 18 -- Turn off the machine.

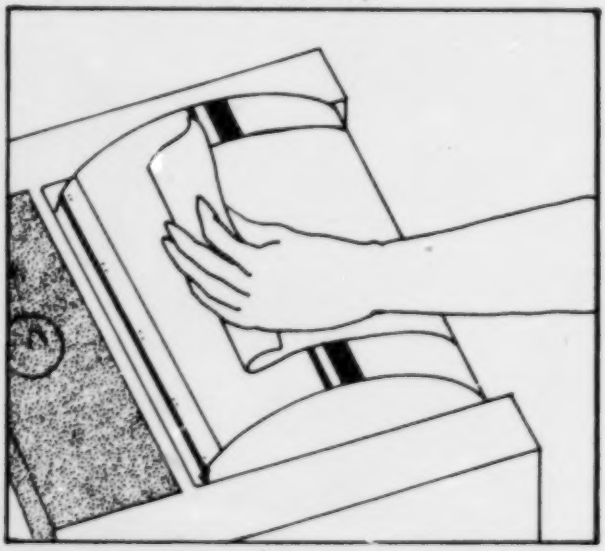


STEP 19 – Push the feed pressure lever back to its original (beginning) position.

19



STEP 20 – Place the fluid tank in its original upright position and unlock tray.



STEP 21 – Remove the master from the drum and throw away. (It may be kept, however, if you need to keep it.) Clean up work area.

## Check Point

Did you leave the machine's levers in the same positions you found them?

Did you return the fluid tank to an upright position?

Did your copies run off properly because you put the master on correctly?

Did you run off the right number of copies?

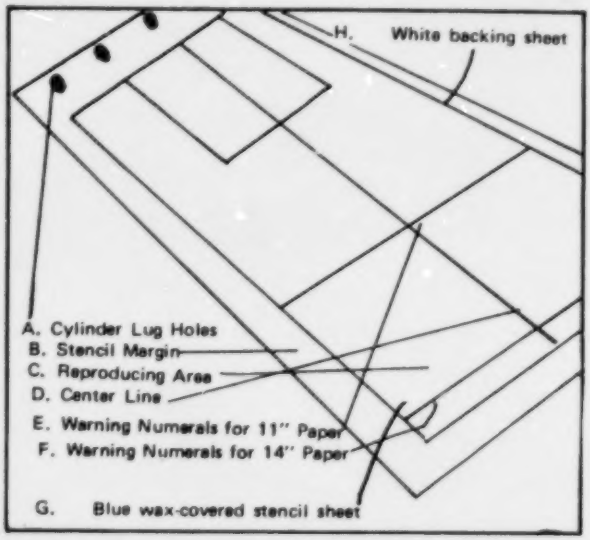
Did you leave the area clean?

20

Optional:

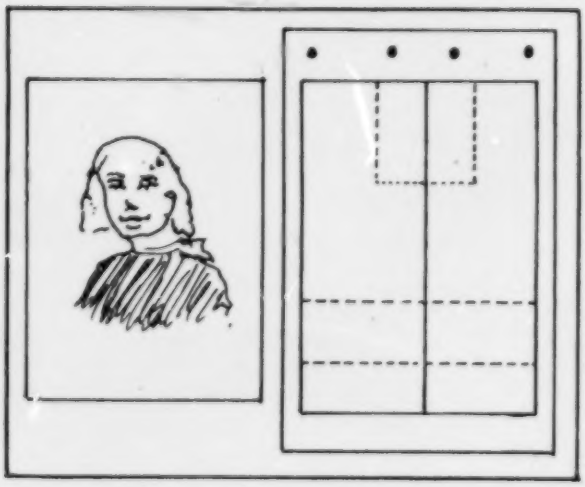
## Instructional Objective VI

The student will prepare a stencil to be duplicated on a mimeograph machine.

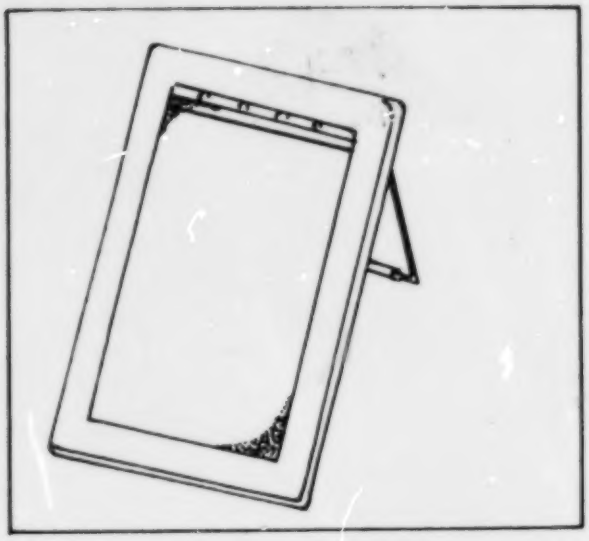

H. White backing sheet
A. Cylinder Lug Holes
B. Stencil Margin
C. Reproducing Area
D. Center Line
E. Warning Numerals for 11" Paper
F. Warning Numerals for 14" Paper
G. Blue wax-covered stencil sheet

STEP 1 – Locate these sections on your stencil:

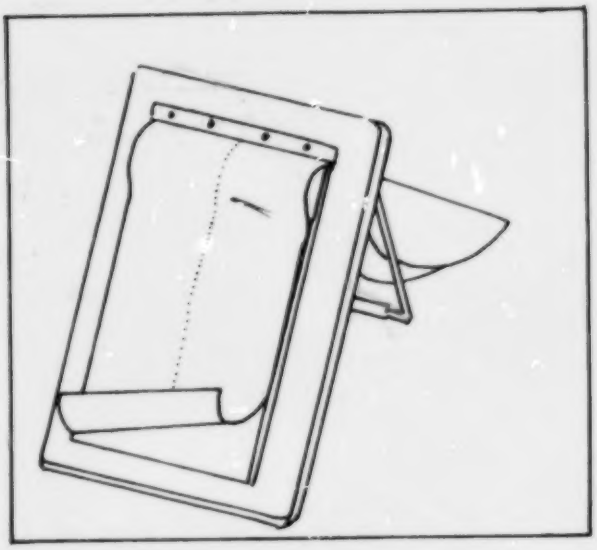
A. Cylinder lug holes
B. Stencil Margin
C. Reproducing area
D. Center line
E. Warning numerals for 11" paper
F. Warning numerals for 14" paper
G. Blue wax-covered stencil sheet
H. White backing sheet



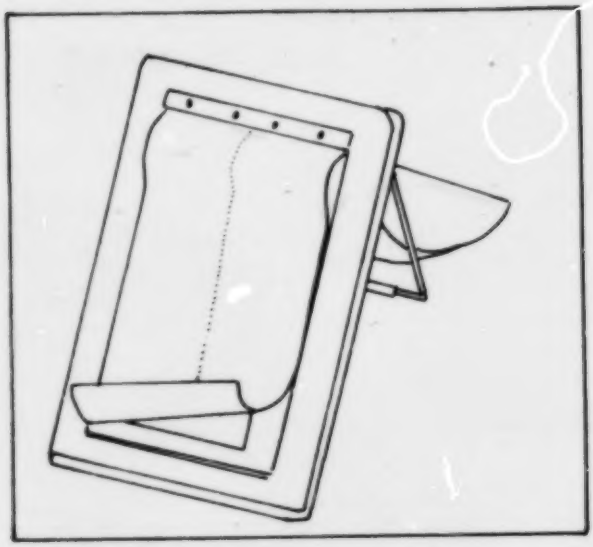
STEP 2 – Prepare a rough draft of what you are going to put on the stencil.



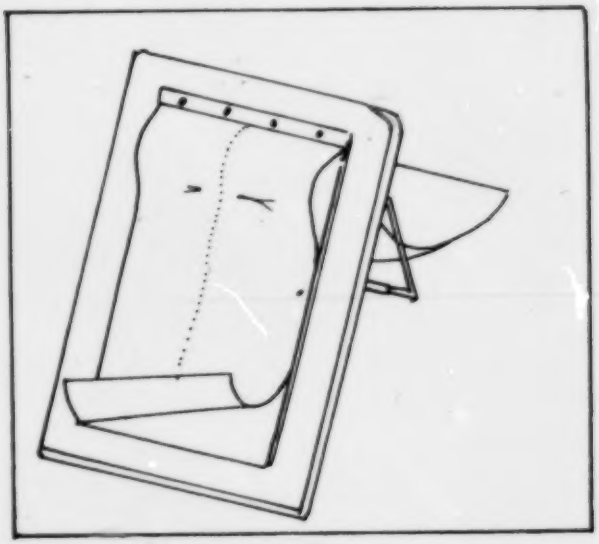
STEP 3 – Examine the light table.



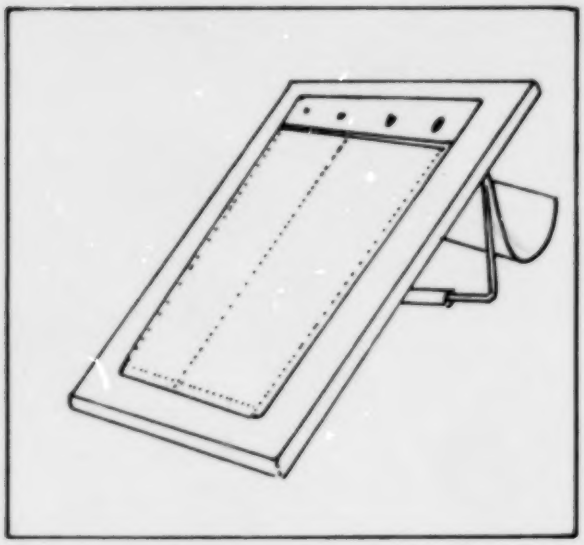
STEP 5 – Locate the little slot on the top of the board. The backing sheet slips through this slot.



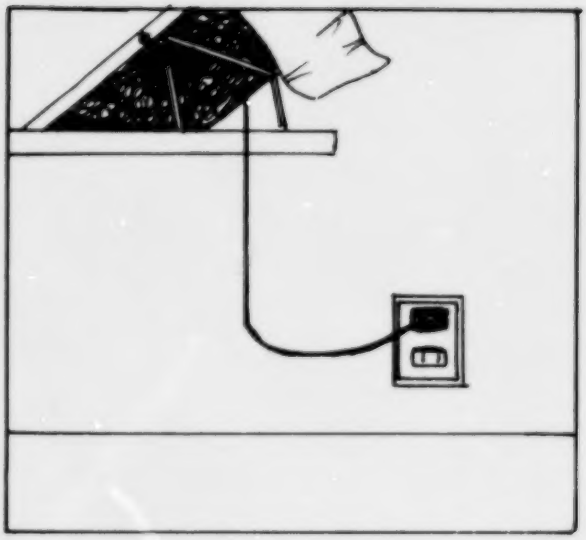
STEP 4 – It is much easier to trace the copy than to draw it free hand. Attach the stencil at the top of the board.



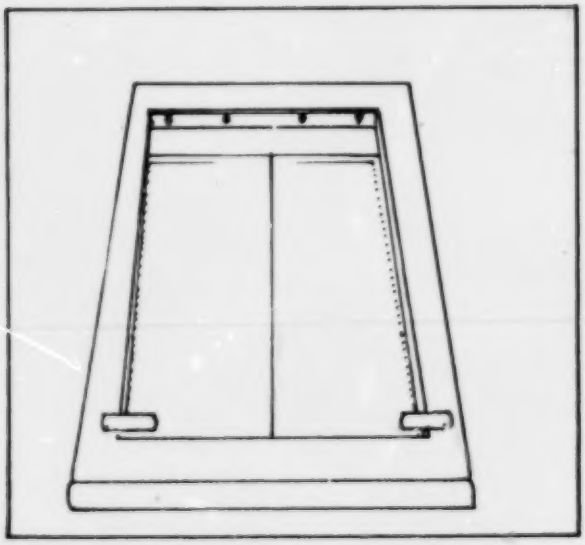
STEP 6 – Put tracing copy (the picture you want to trace) under the stencil.



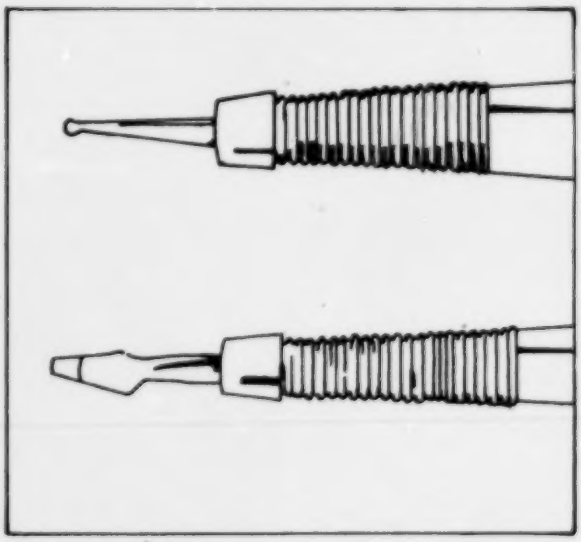
STEP 7 – Replace the stencil on the top.



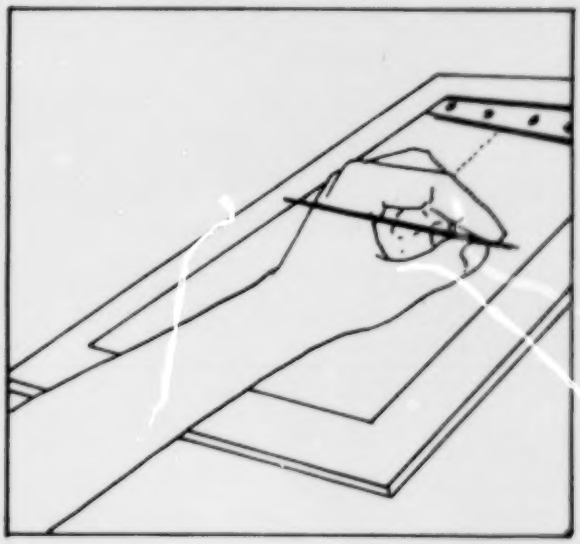
STEP 9 – Turn on light.



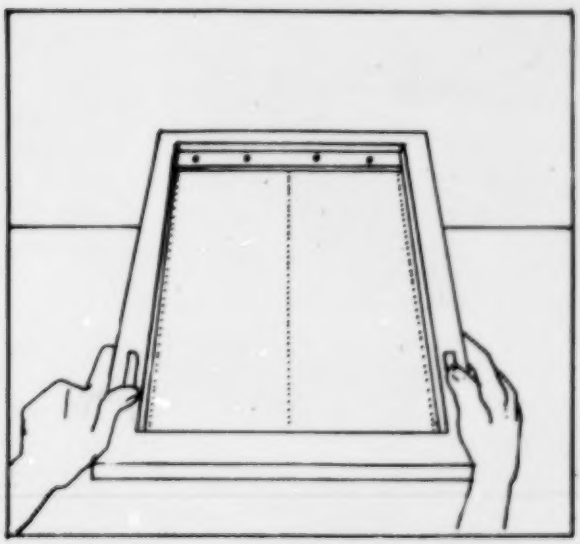
STEP 8 – Secure the stencil with clamps or cellophane tape.



STEP 10 – Examine the styli. These pen-like instruments are used in writing on the mimeograph stencil. Use the stylus with a loop for drawing pictures. Use the stylus with a ball point for writing.



STEP 11 – Trace over original stencil.



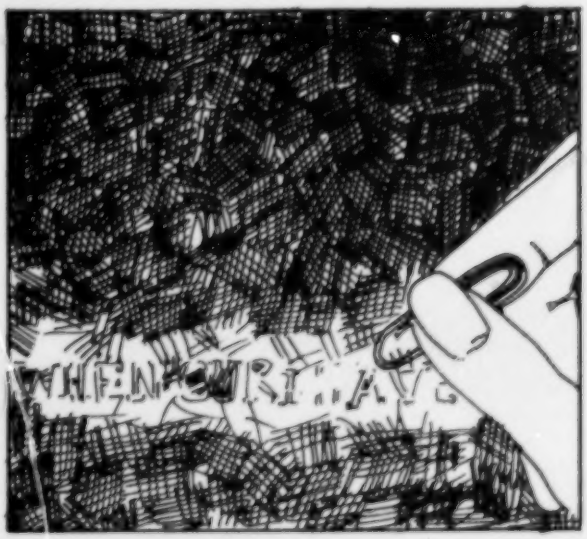
STEP 12 – Remove stencil carefully when finished.

## Check Point

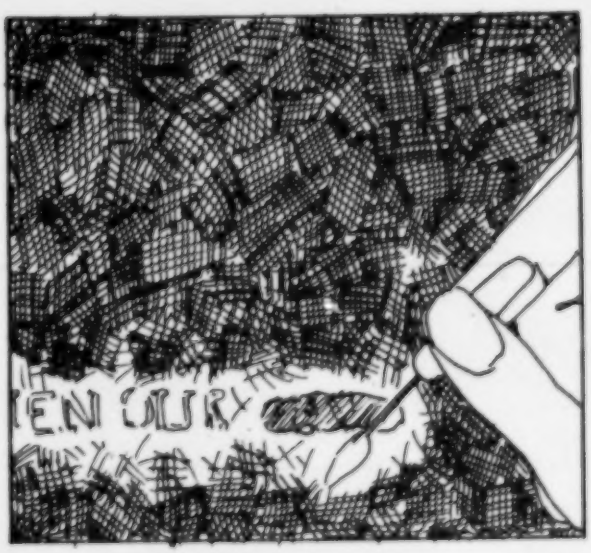
Did you find all sections of your stencil?
Did you prepare a rough draft?
Did you properly attach your stencil to the light table?

## Instructional Objective VII

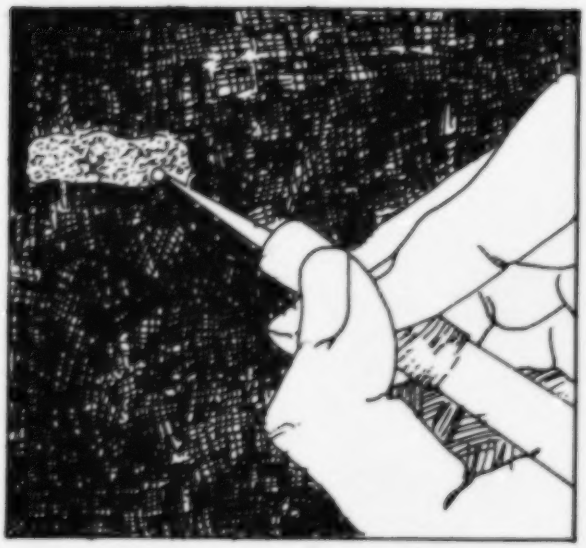
The student will correct errors on a stencil.



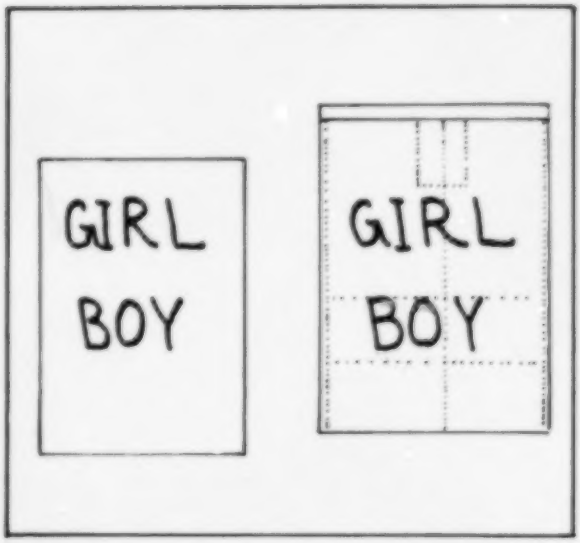
STEP 1 – With a paper clip, burnish (rub over) the mistake only.



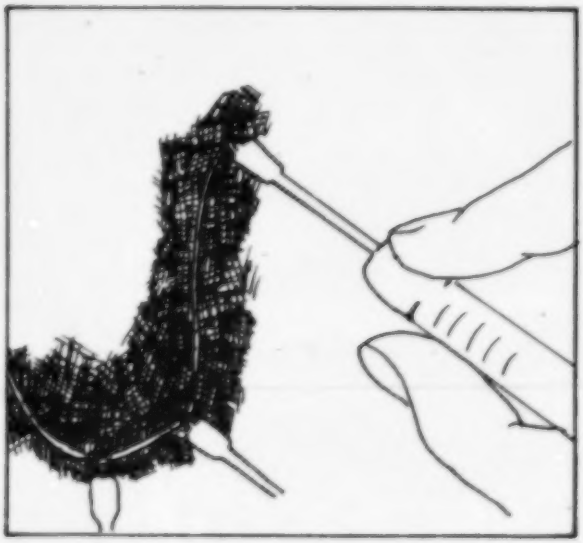
STEP 2 – Apply the correction fluid only to the mistake.



STEP 3 – Let dry, then draw or write over the mistake.




STEP 5 – Finish the stencil exactly as you want the copy you wish to run off to look.



STEP 4 – Press down hard enough to separate the wax coating but not hard enough to leave a hole. This will cause an ink blob on your paper.

## Check Point

CHECK POINT

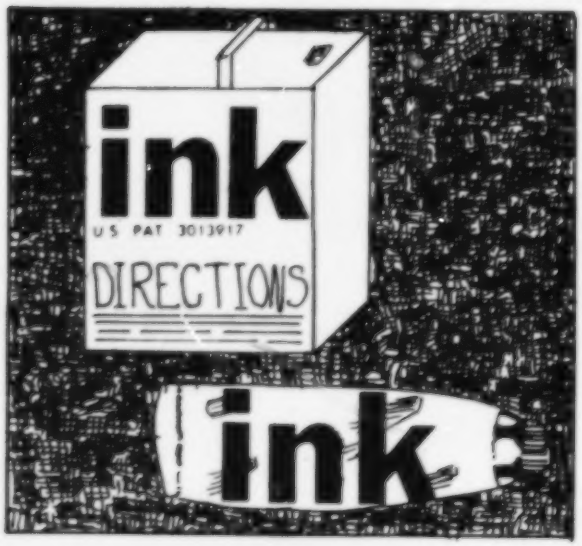
Did you correct all errors?

Did you apply enough pressure to separate the wax?

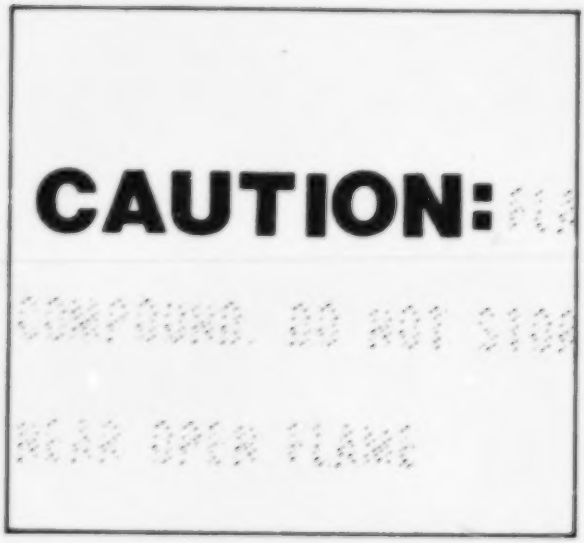
Is the finished copy complete?

## Instructional Objective MII

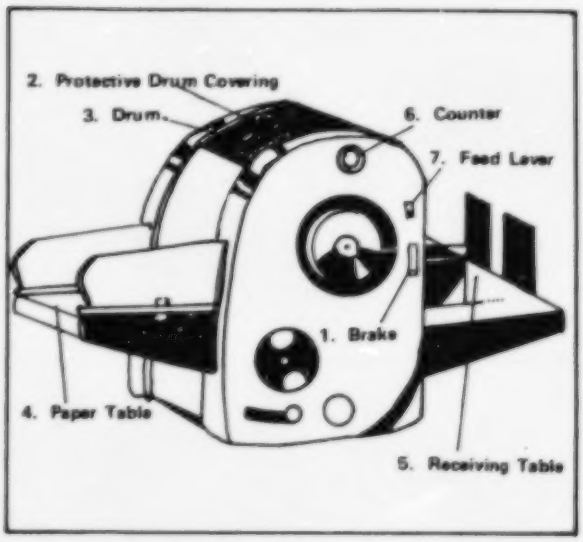
The student will operate a mimeograph machine.




STEP 1 – Read all instructions on the can or tube of ink.

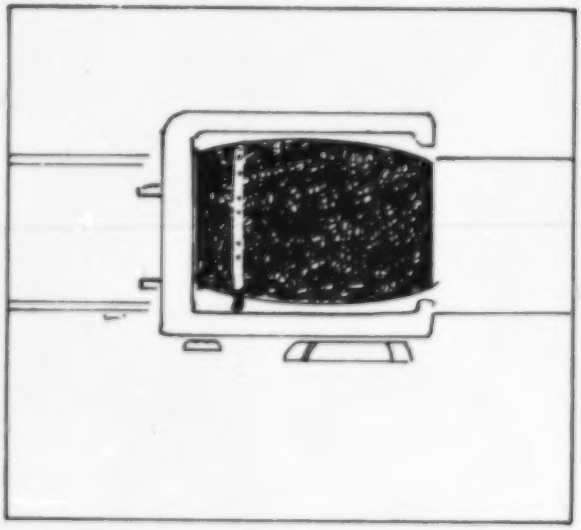



STEP 2 – Read the cautions. Know the solvent (what will take the ink out of your clothes), if given.

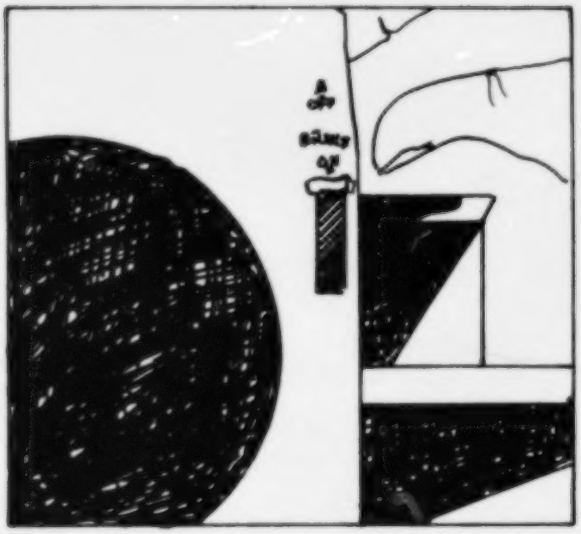



STEP 3 – Locate all these parts on your machine:

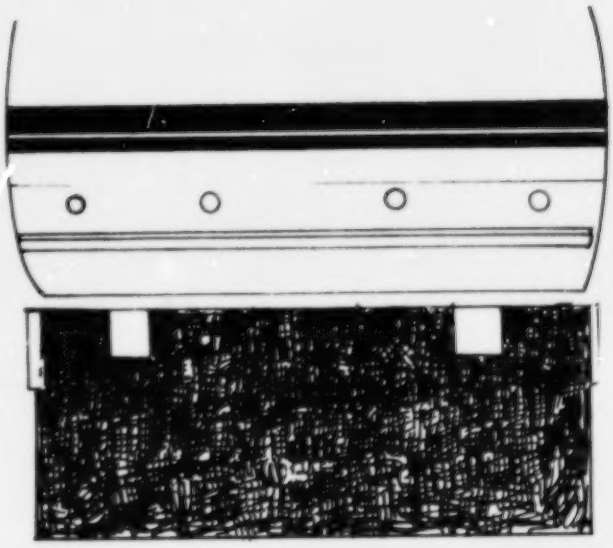
A. Brake
B. Protective covering
C. Drum
D. Paper table
E. Receiving table
F. Counter
G. Feed lever



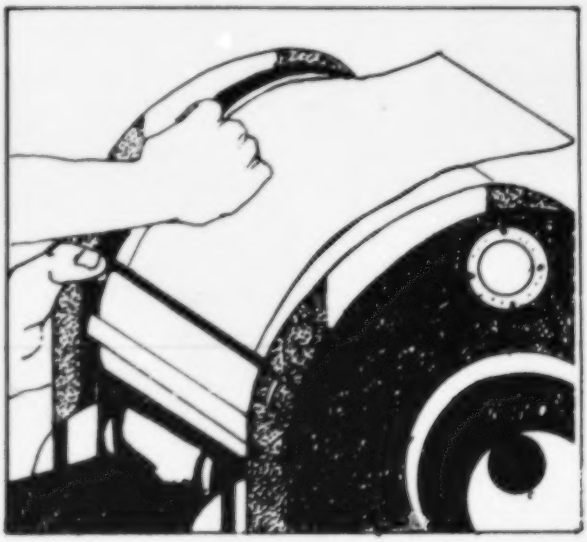
STEP 4 – Locate these parts too, – cylinder lugs and clamps (or bar) to hold stencil.



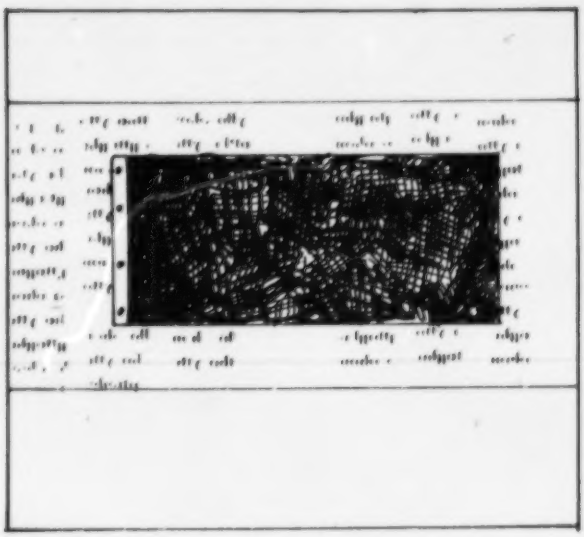
STEP 5 – Release brake.



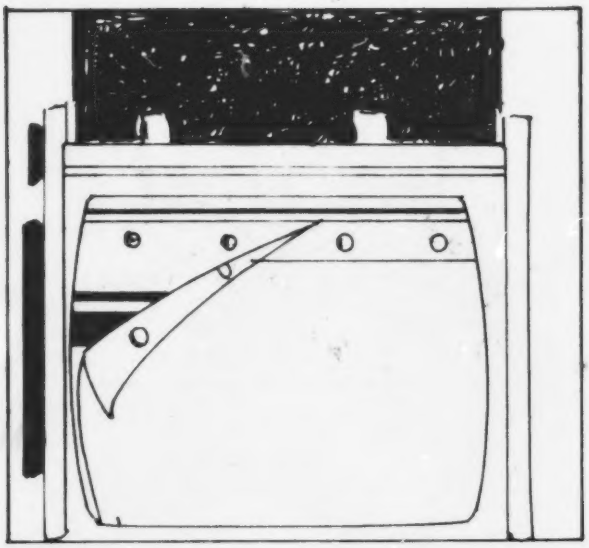
STEP 7 – Pull covering slowly to the left and remove at the cylinder lugs which you will find at the top under the clamp.



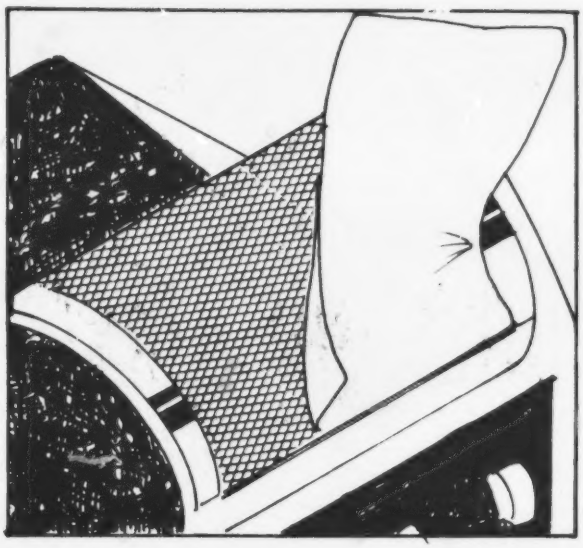
STEP 6 – Remove the protective covering from the ink drum by pulling forward the clamp at the bottom that holds the covering. (This may be a bar instead of a clamp.)



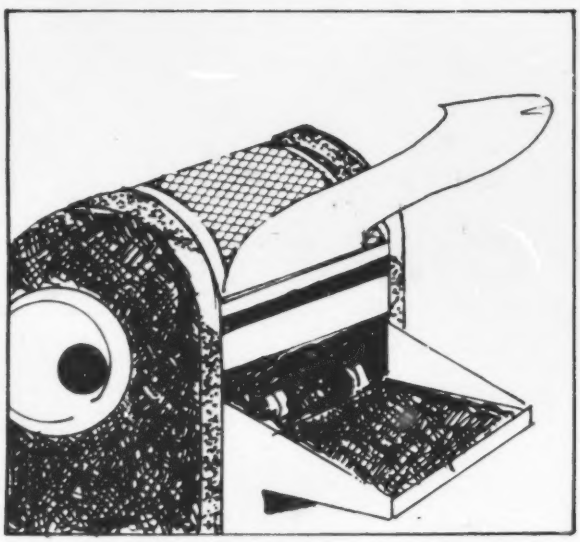
STEP 8 – Put the protective covering on an old newspaper to keep from getting the ink on anything else.



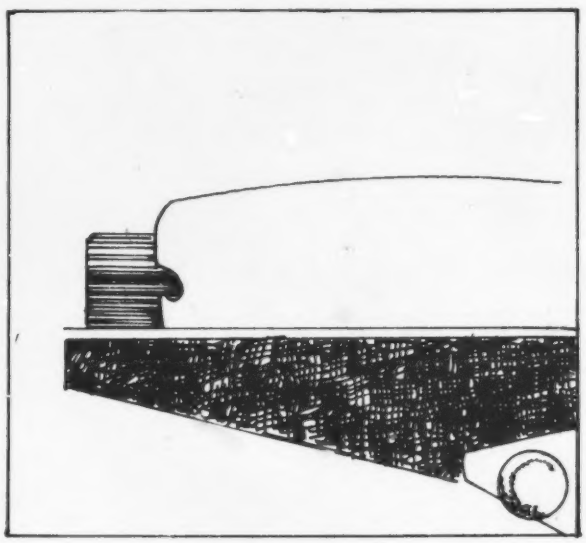
STEP 9 – Place the four cylinder lug holes into the cylinder lugs so that the white backing sheet is on top. Put the clamp over the lugs.



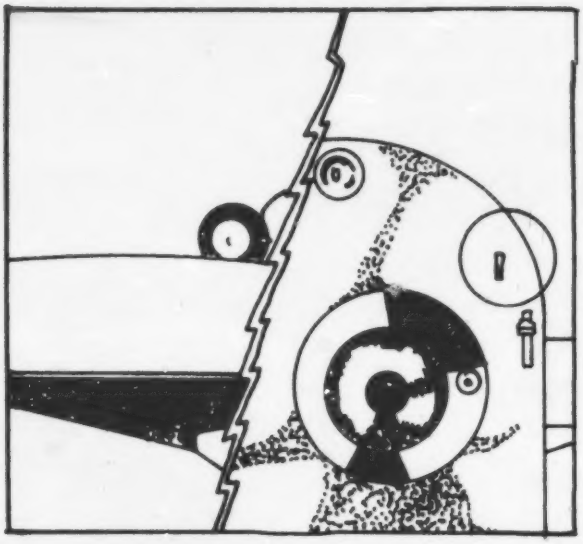
STEP 11 – Tear off the white backing sheet at the dotted line and throw the white backing sheet away.



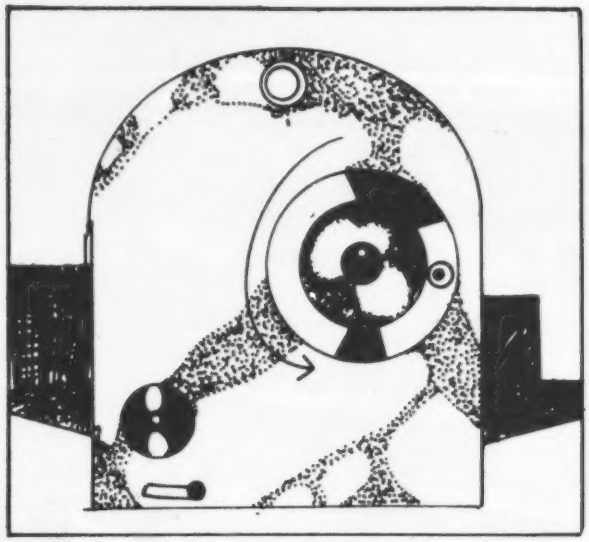
STEP 10 – Smooth stencil over the drum. Secure the stencil at the bottom with the clamp (or bar). Make sure to catch only the stencil--not the white backing sheet.



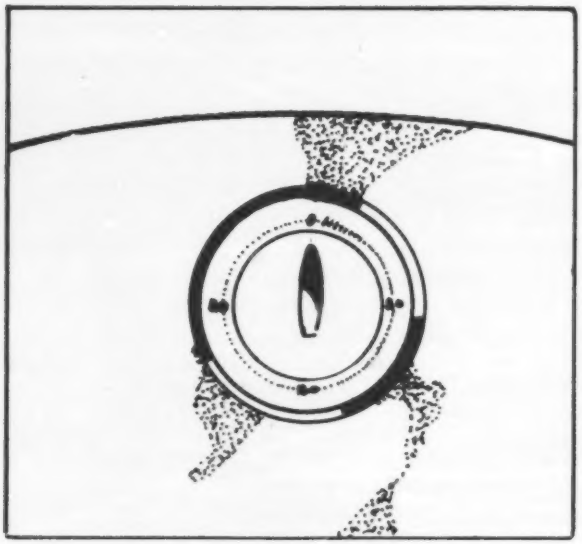
STEP 12 – Put a sufficient amount of mimeograph paper on the paper table.



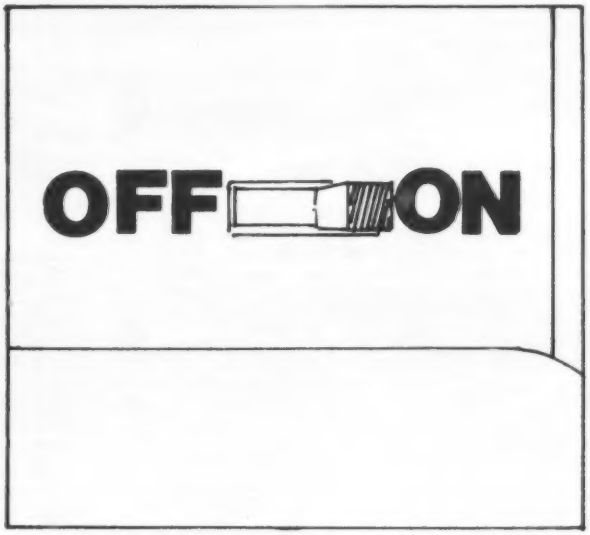
STEP 13 – Lower feed rollers by releasing the feed lever.



STEP 15 – If using a manual machine, turn crank in a counterclockwise motion. Be sure to always stop when the "stop here" line on the drum is lined up with the "stop here" line on the top of the machine. (Omit the next 3 steps.)

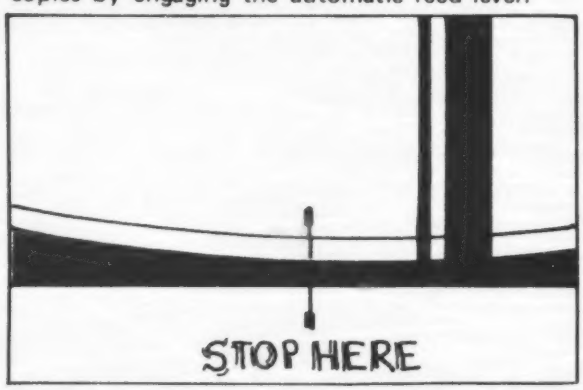


STEP 14 – Put the counter on 0. (If using electric machine, omit the next step.)

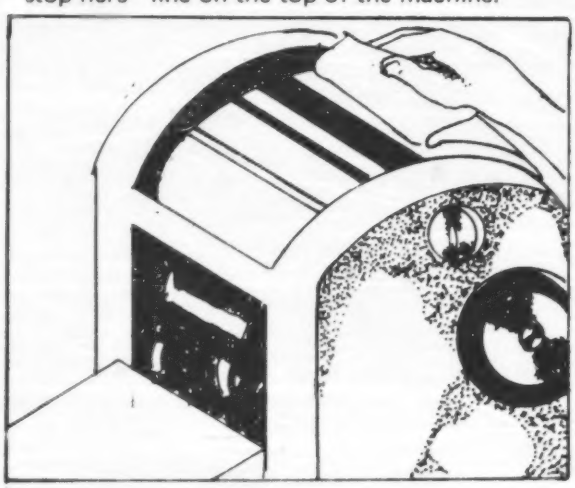



STEP 16 – If using an electric machine make sure the machine is on.

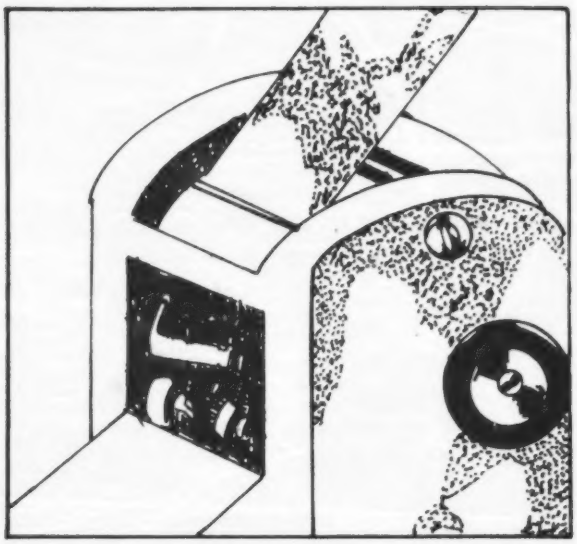
STEP 17 – Run off the desired number of copies by engaging the automatic feed lever.




STEP 18 – Apply brake only when the "stop here" line on the drum is lined up with the "stop here" line on the top of the machine.



STEP 19 – Take off the stencil.



STEP 20 – Replace the protective covering.

STEP 21 – Clean up the work area.

## Check Point

Did you find all the machine parts?
Did you properly fit the stencil on the mimeograph machine?
Did you replace the protective covering?
Did you clean up?

**201.362-030 SECRETARY (clerical)** **secretarial stenographer.**

Schedules appointments, gives information to callers, takes dictation, and otherwise relieves officials of clerical work and minor administrative and business detail: Reads and routes incoming mail. Locates and attaches appropriate file to correspondence to be answered by employer. Takes dictation in shorthand or by machine [STENOTYPE OPERATOR (clerical)] and transcribes notes on typewriter, or transcribes from voice recordings [TRANSCRIBING-MACHINE OPERATOR (clerical)]. Composes and types routine correspondence. Files correspondence and other records. Answers telephone and gives information to callers or routes call to appropriate official and places outgoing calls. Schedules appointments for employer. Greets visitors, ascertains nature of business, and conducts visitors to employer or appropriate person. May not take dictation. May arrange travel schedule and reservations. May compile and type statistical reports. May oversee clerical workers. May keep personnel records [PERSONNEL CLERK (clerical)]. May record minutes of staff meetings. May make copies of correspondence or other printed matter, using copying or duplicating machine. May prepare outgoing mail, using postage-metering machine.

**207.682-010 DUPLICATING-MACHINE OPERATOR (clerical) I**

Operates machine to reproduce data or ruled forms on paper from type in flat impression bed or plates on revolving cylinder: Selects type or embossed plate and positions type or plate on cylinder or flat bed of machine. Loads paper in feed tray and makes adjustments to parts, such as inking rolls or ribbon and feeding mechanism. Starts machine which automatically pushes sheets under revolving cylinder or against flat impression bed of type where paper is printed. May keep record of number of copies made. Important variations may be indicated by trade name of machines used.

**207.682-014 DUPLICATING-MACHINE OPERATOR (clerical) II**

Operates duplicating machine to print typewritten or handwritten matter directly from master copy: Places master copy on drum of machine and blank paper in feed tray. Adjusts machine for speed, size of paper, and flow of process liquid to moistening pad. Starts machine that pulls blank sheets across moistening pad and transfers image from master copy onto copy sheet. May type or draw diagram to prepare original copy. Important variations may be indicated by trade name of machine operated.

30